



# Allworx Unified Directory

## Installation Guide

October 2008

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## Assumptions

This manual assumes you have some experience setting up and maintaining a website using Internet Information Server 6.0 (IIS). While the procedures in this guide are reasonably detailed, it is not the intent of this guide to provide all the information needed to setup and maintain a web server.

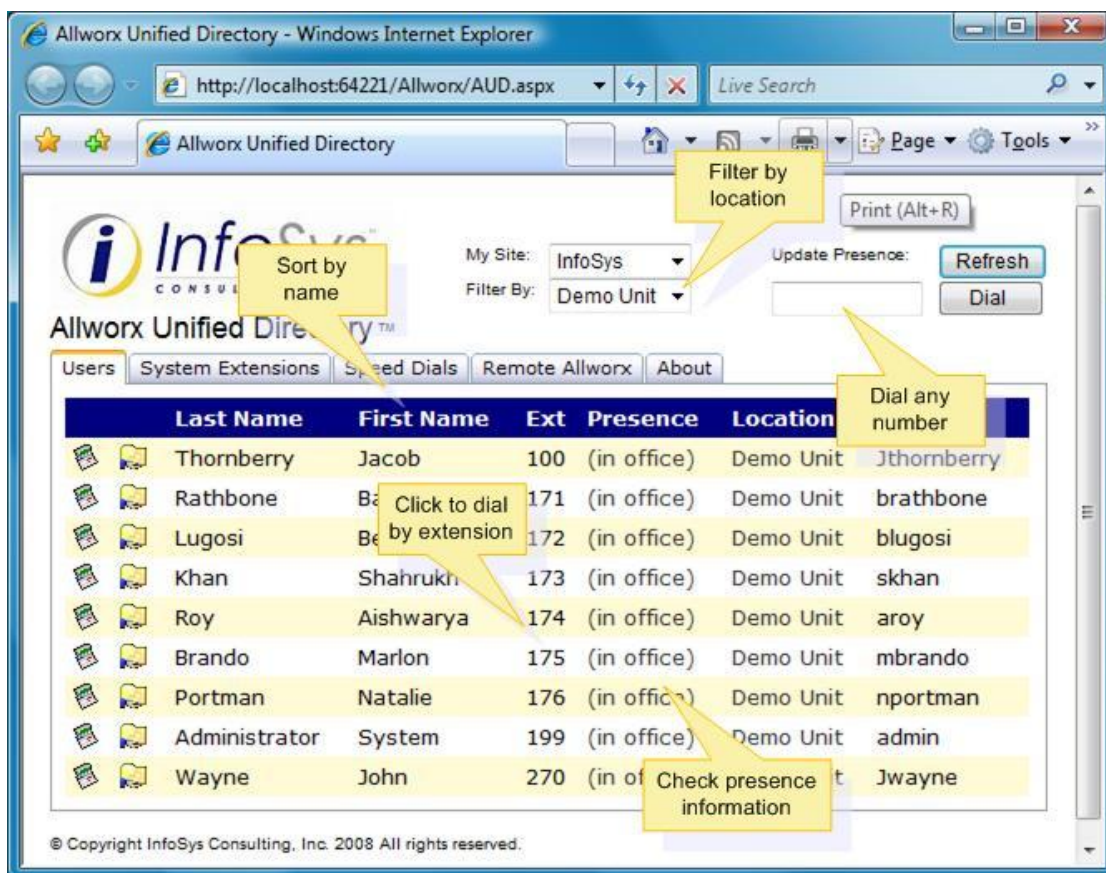
## Overview

The Allworx Unified Directory (AUD) merges user extension information from multiple Allworx servers into a single unified directory. AUD provides a streamlined web interface that can be installed locally on your web server, or host.

This guide outlines the general procedures for installing AUD on Microsoft Internet Information Server 6.0. It is assumed that you, the installer, have some experience managing IIS server. The example used throughout this guide will walk you through the process of installing AUD within an existing website.

Key benefits:

- Provides a single combined directory of all extensions and speed dials for all sites
- Eliminates the need to maintain a manual list of internal extensions
- Displays presence information for all users across all sites (In Office, On Vacation, Away, etc.)
- Enables you to dial by simply clicking on the extension or speed dial
- Allows you to dial any number by cut and paste
- Helps you quickly find information by filtering lists by location, and sorting by any column.



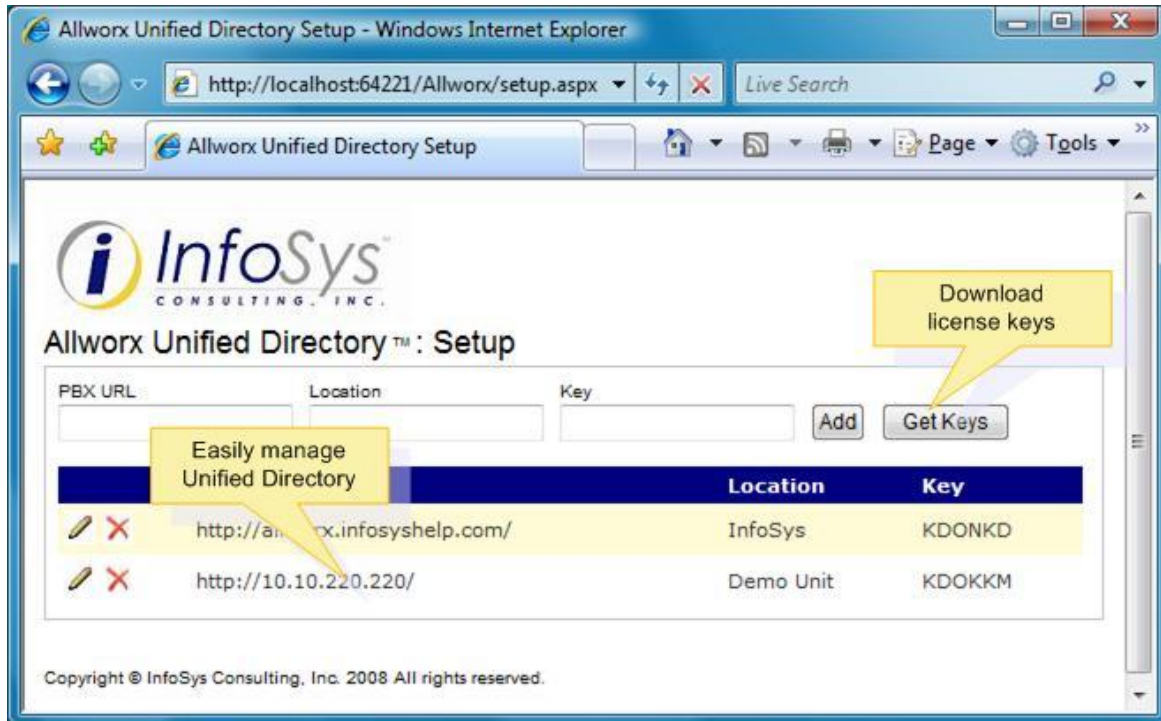
The screenshot shows the Allworx Unified Directory web interface. The browser address bar shows the URL `http://localhost:64221/Allworx/AUD.aspx`. The interface includes a search bar, a 'Live Search' button, and a 'Print (Alt+R)' button. Below the search bar, there are dropdown menus for 'My Site:' (set to 'InfoSys') and 'Filter By:' (set to 'Demo Unit'). There are also 'Update Presence:' and 'Refresh' buttons, and a 'Dial' button. The main content area has tabs for 'Users', 'System Extensions', 'Speed Dials', 'Remote Allworx', and 'About'. The 'Users' tab is active, displaying a table of users. The table has columns for 'Last Name', 'First Name', 'Ext', 'Presence', 'Location', and a speed dial link. The table contains the following data:

Last Name	First Name	Ext	Presence	Location	Speed Dial
Thornberry	Jacob	100	(in office)	Demo Unit	Jthornberry
Rathbone	Ba	171	(in office)	Demo Unit	brathbone
Lugosi	Be	172	(in office)	Demo Unit	blugosi
Khan	Shahrukh	173	(in office)	Demo Unit	skhan
Roy	Aishwarya	174	(in office)	Demo Unit	aroy
Brando	Marlon	175	(in office)	Demo Unit	mbrando
Portman	Natalie	176	(in office)	Demo Unit	nportman
Administrator	System	199	(in office)	Demo Unit	admin
Wayne	John	270	(in office)	Demo Unit	Jwayne

Callouts in the image point to various features: 'Sort by name' points to the table header; 'Filter by location' points to the 'Filter By:' dropdown; 'Click to dial by extension' points to the 'Ext' column; 'Dial any number' points to the speed dial link; and 'Check presence information' points to the 'Presence' column.

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Managing the Allworx Unified Directory is accomplished using a simple web interface. You can add additional servers at any time. Purchasing a license key takes only a minute and you can automatically download the license over the internet by pressing the "Get Keys" button.



#### System Requirements:

- Microsoft Windows Server 2003 and above
- Microsoft Internet Information Server 6.0 and above
- Microsoft .Net Framework 3.5
- 3 MB Hard Disk space
- Internet Explorer 6.0 and above / Firefox 2.0 and above
- Allworx Call Assistant license (to use TAPI dialing feature)
- Allworx TAPI software (to use the TAPI dialing feature)

## Prerequisites

Prior to installing the Allworx Unified Directory the following prerequisites must be installed on your server:

- **Microsoft Windows Server 2003 (or above)** The Allworx Unified Directory has been tested on the Standard versions of Windows Server 2003, 2003 R2, and 2008. This installation guide assumes Windows Server 2003.
- **Microsoft Internet Information Server (IIS) 6.0 (or above)** This installation guide was written for IIS 6.0, however the Allworx Unified Directory will also run on IIS 7.0. IIS can be installed from:

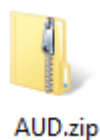
Control Panel  
→ Add Remove Programs  
→ Add Remove Windows Components  
→ Application Server  
→ Details  
→ Internet Information Services (IIS)

You will need access to the Windows Server 2003 CD.

- **Microsoft .Net Framework 3.5** The .Net Framework can be downloaded from <http://download.microsoft.com>.

## Download Allworx Unified Directory

You can download the Allworx Unified Directory installation files from <http://www.infosyshelp.com>. The files are packaged in a compressed folder.



Once you have downloaded the folder, uncompress the entire contents (files and folders) into a folder on your PC. Later in these procedures you will be asked to simply copy these uncompressed files and folders to IIS.

## IIS Application Pools

You can skip this section if...

*If any existing websites on your server will operate using the 3.5 version of the framework, and you are running the 32 bit version of Windows Server, you can skip this section.*

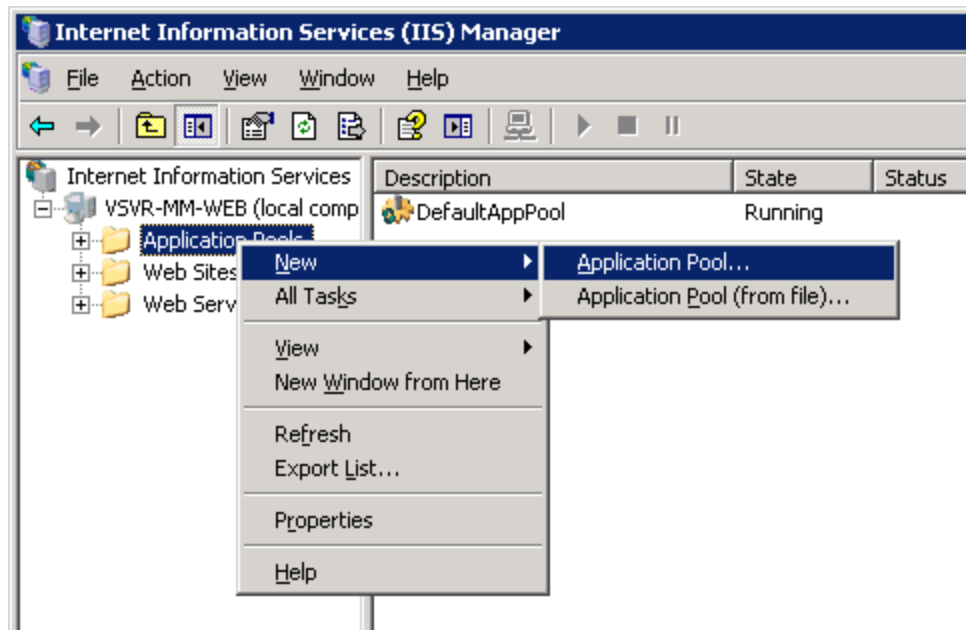
The Allworx Unified Directory uses AJAX components supported by the .Net Framework 3.5, and a 32 bit TAPI application (DLL). If you already have a website on your server running an older version of the framework, or you are running the 64 bit version of Windows Server, you will need to create a separate IIS Application Pool.

Create an IIS Application pool:

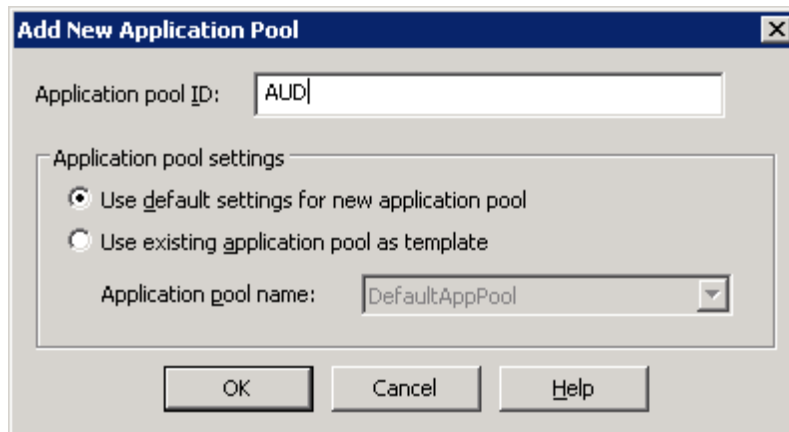
1. In the IIS Manager, create a new IIS Application Pool (see Figure 3 below).

Start

- Settings
- Control Panel
- Administrative Tools
- Internet Information Services (IIS) Manager



2. Create the new application pool with the name "AUD" and select the "Use default settings for new application pool" radio button. Finally press the "OK" button to create the pool.



## Copy AUD Program Files

This guide assumes you already have an existing website and you want to host AUD within this site. For example, if the URL of your website was [www.mydomain.com](http://www.mydomain.com), to access AUD you would type [www.mydomain.com/aud/](http://www.mydomain.com/aud/).

To “install” AUD on your server, you first need to create a folder to hold the AUD program files and folders you downloaded and extracted previously (see the section above titled: Download Unified Directory).

This folder is typically installed on your web server within the same folder structure as your existing website. For example, if your existing website is stored at c:\inetpub\wwwroot, you could create a folder at c:\inetpub\wwwroot\aud.



Create the desired folder and copy **ALL** of the previously extracted **files** and **folders** to your newly created “AUD” folder.

## Creating a Virtual Directory

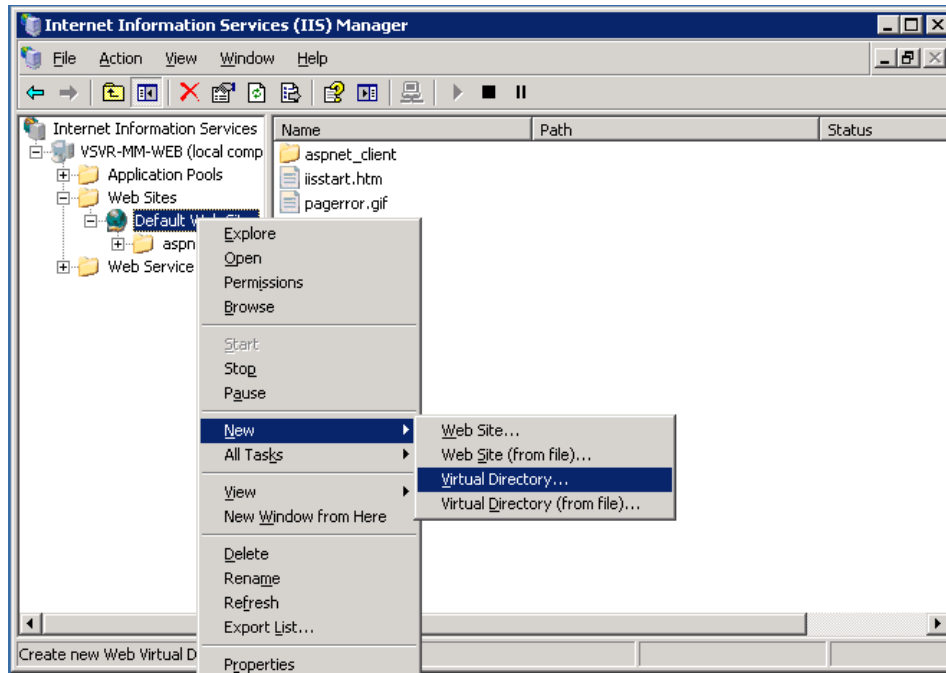
To configure AUD within your existing website, you need to create a new virtual directory using the IIS Manager:

Start  
→ Settings  
→ Control Panel  
→ Administrative Tools  
→ Internet Information Services (IIS) Manager

The AUD virtual directory is typically created within the same folder structure as your existing website. In the example below, we are creating a virtual directory within the default website; however, you should create the directory within your website.

Create a virtual directory:

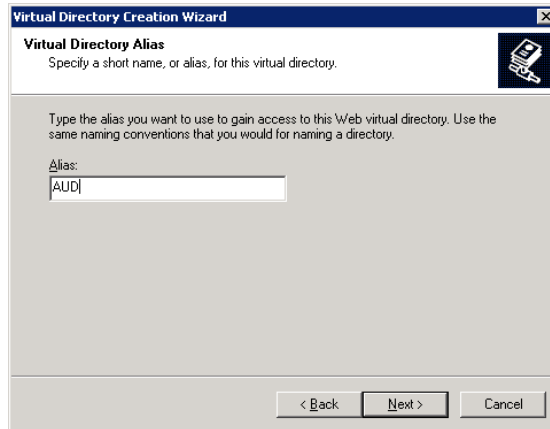
1. Open the IIS Manager
2. Expand the “local computer” within the IIS Manager
3. Expand “Web Sites”
4. Right mouse click on your website (“Default Website” in our example)
5. Choose “New”
6. Select “Virtual Directory...”



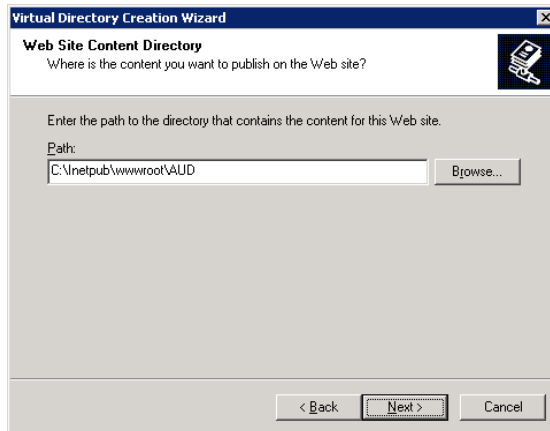
The “Virtual Directory Creation Wizard” should display:



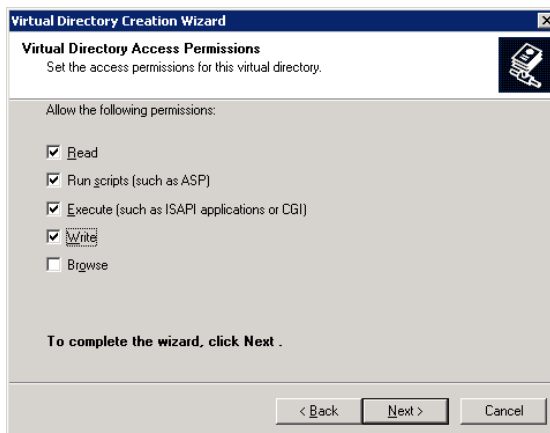
7. Press Next on the Directory Creation Wizard



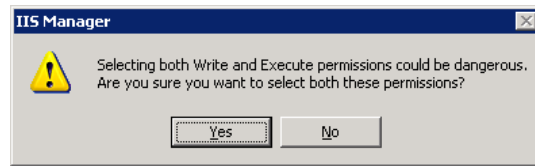
8. Type "AUD" as the alias name of your virtual directory.



9. Browse to the folder where you copied the files you downloaded and extracted (See example in the screenshot above) and press Next.



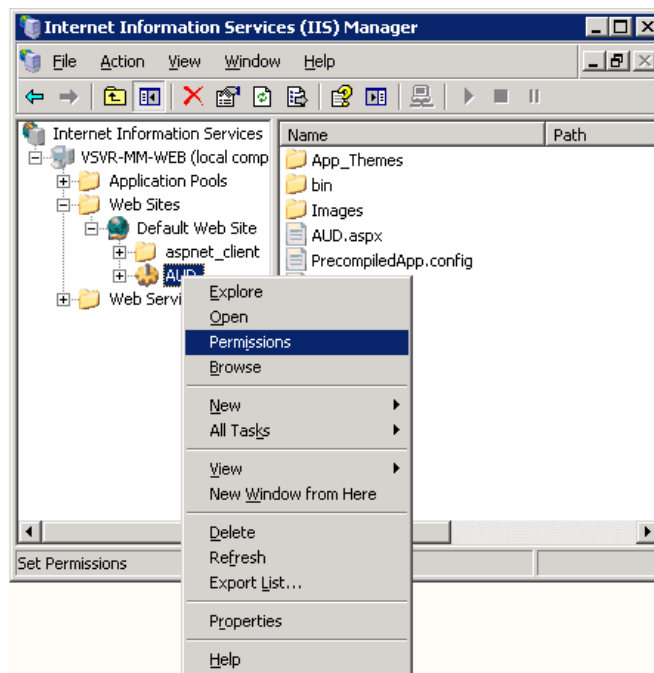
10. Check Read, Run Scripts, Execute, and Write and press Next.



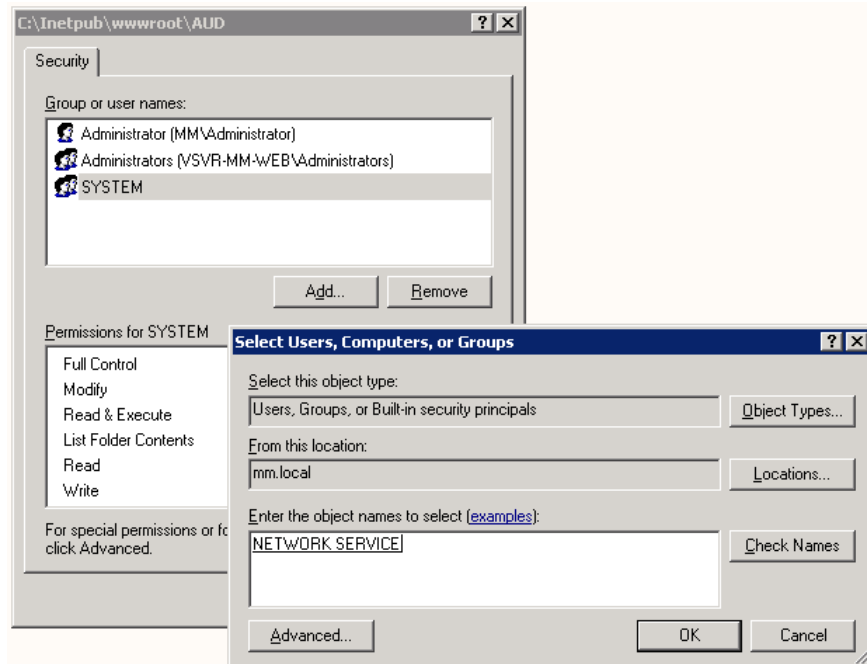
11. You need all of the specified permissions because AUD uses scripting, executes TAPI functions, and writes updates to configuration files. Answer “Yes” to confirm you want both write and execute permissions.



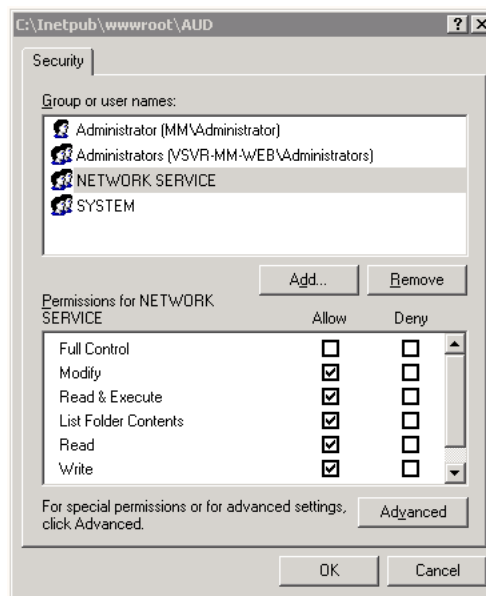
12. Press Finish to complete the initial creation of your virtual directory.



13. Right-mouse click on the AUD virtual directory you just created and choose Permissions

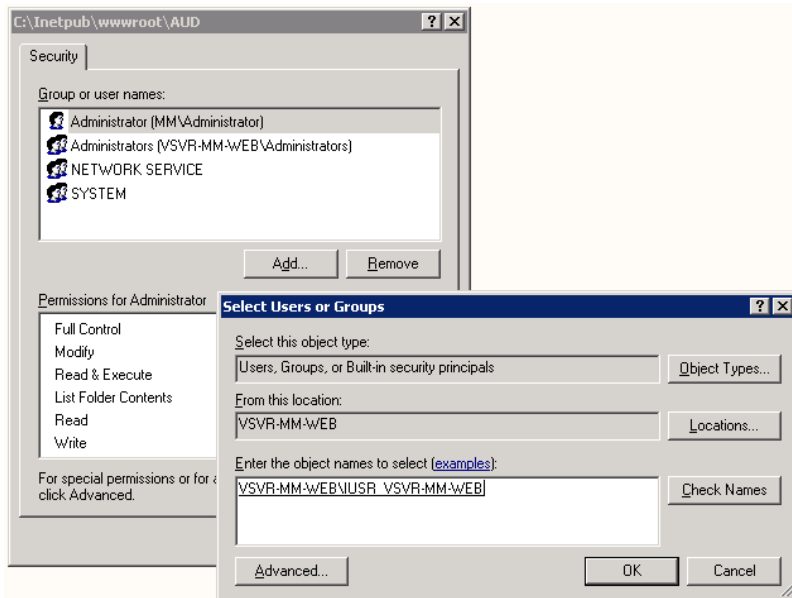


14. Add the NETWORK SERVICE account to the Group or user names list.

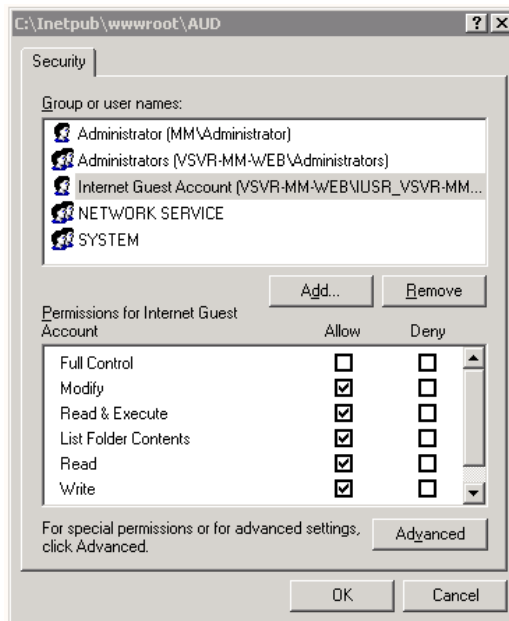


15. Assign the NETWORK SERVICE account Modify, Read & Execute, List Folder Contents, Read, and Write permissions and press OK.

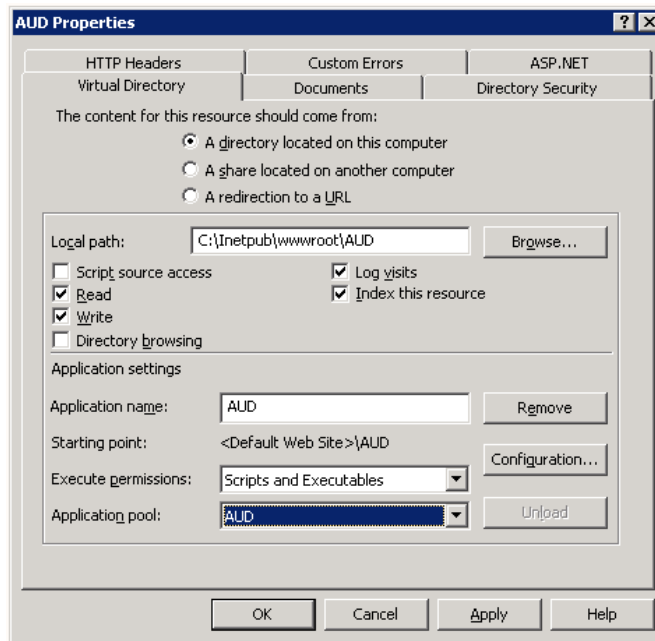
You also need to add the local account (non-domain) IUSR\_<YOUR SERVER NAME> to the list of Group and User names. In this example, the server name is VSVR-MM-WEB, so the account name is IUSR\_VSVR-MM-WEB.



16. Press the Locations button and select your server name then press OK. You should now see your server name in the “From this location” field.
17. Type IUSR\_<YOUR SERVER NAME> in the object names field and press Check Names to confirm you entered the correct account name, then press OK.

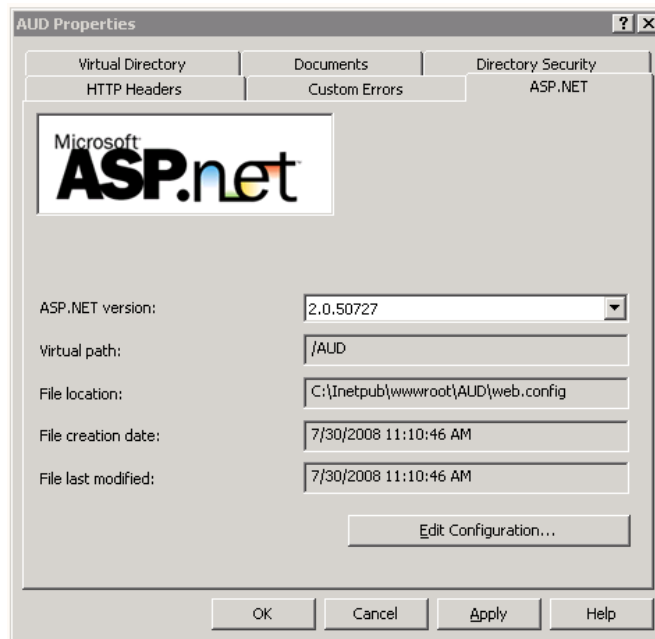


18. Assign the permissions Modify, Read & Execute, List Folder Contents, Read and Write to your local IUSR account by checking each option and then press OK.
19. Right-Click on the “AUD” virtual directory and choose Properties. The following screen will display:



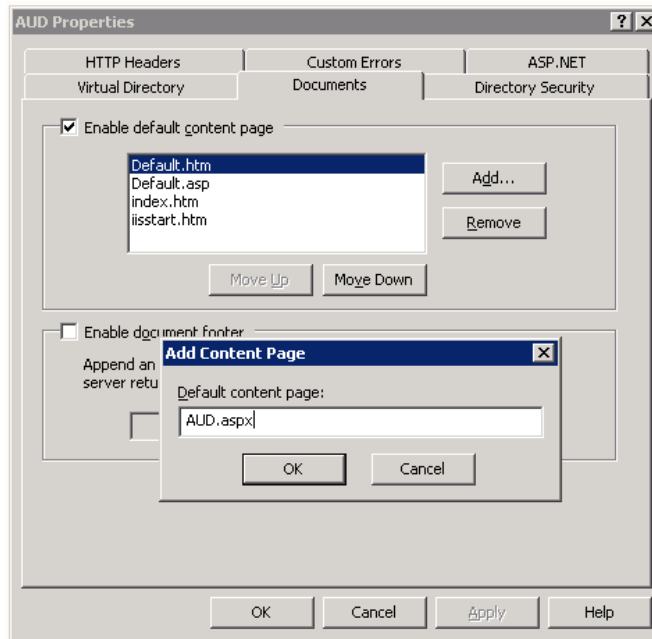
20. If you created an application pool for AUD select the pool name in the Application Pool field.

21. Select the “ASP.NET” tab.

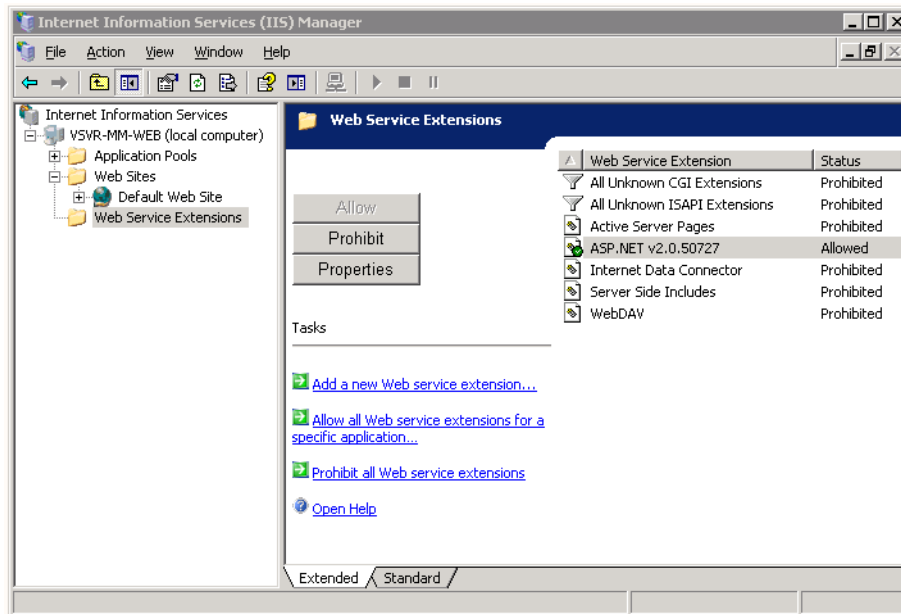


22. Select the 2.0.x ASP.Net version and press Apply.

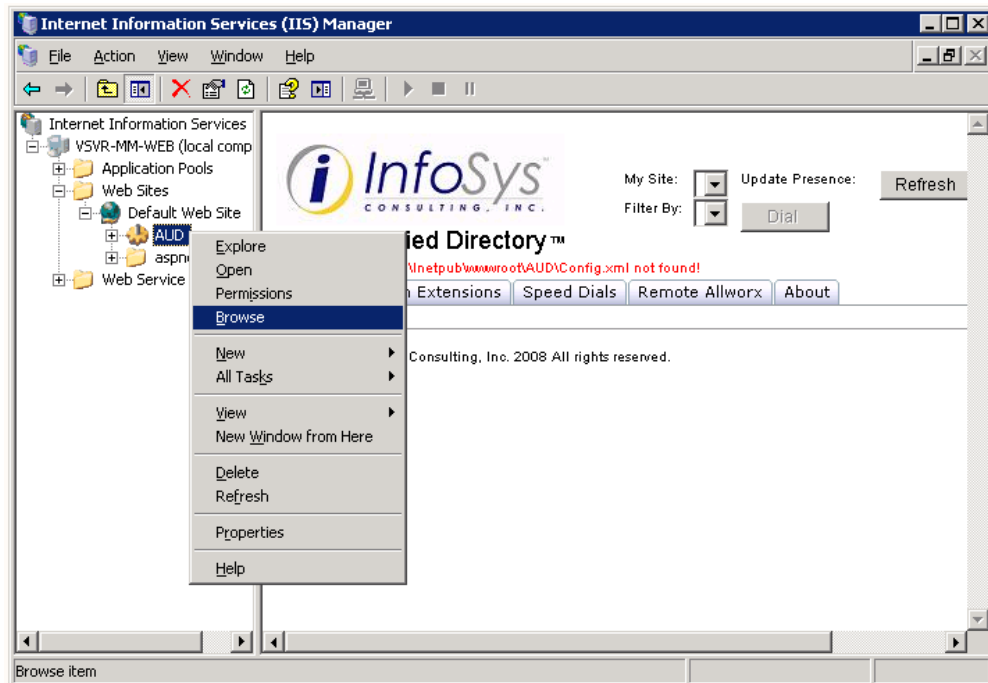
23. Select the Documents tab.



24. Add AUD.aspx to the list of default content pages and move it to the top of the list, then press Apply.
25. Press OK to complete the configuration of the AUD virtual directory.
26. In the IIS manager highlight “Web Service Extensions”



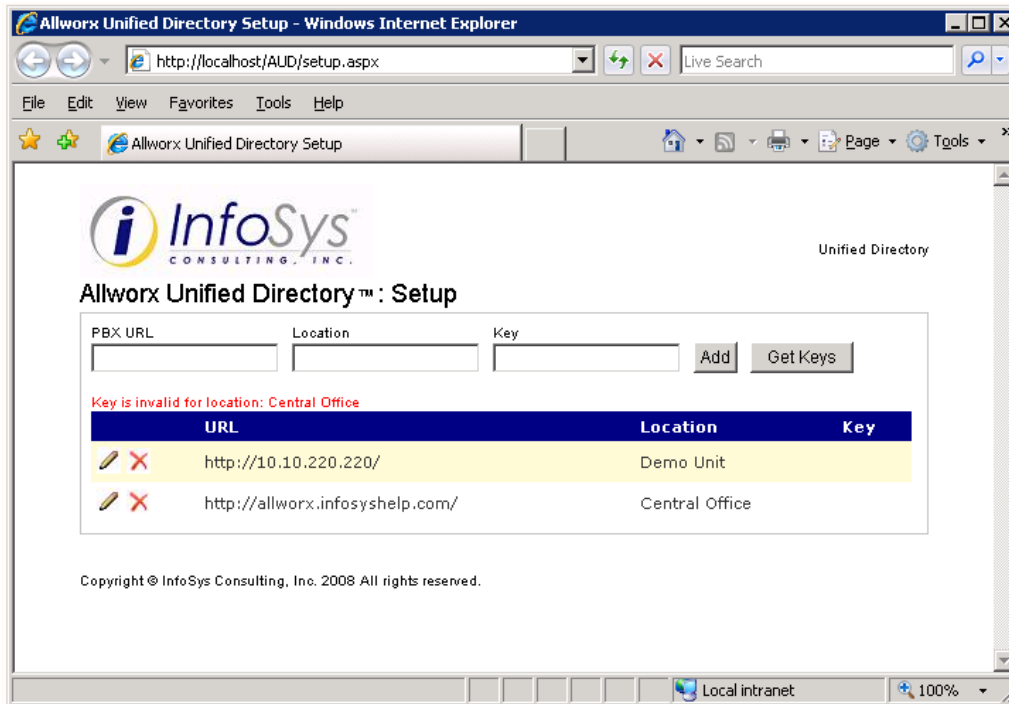
27. Select the ASP.NET v2.0.x and press the Allow button.



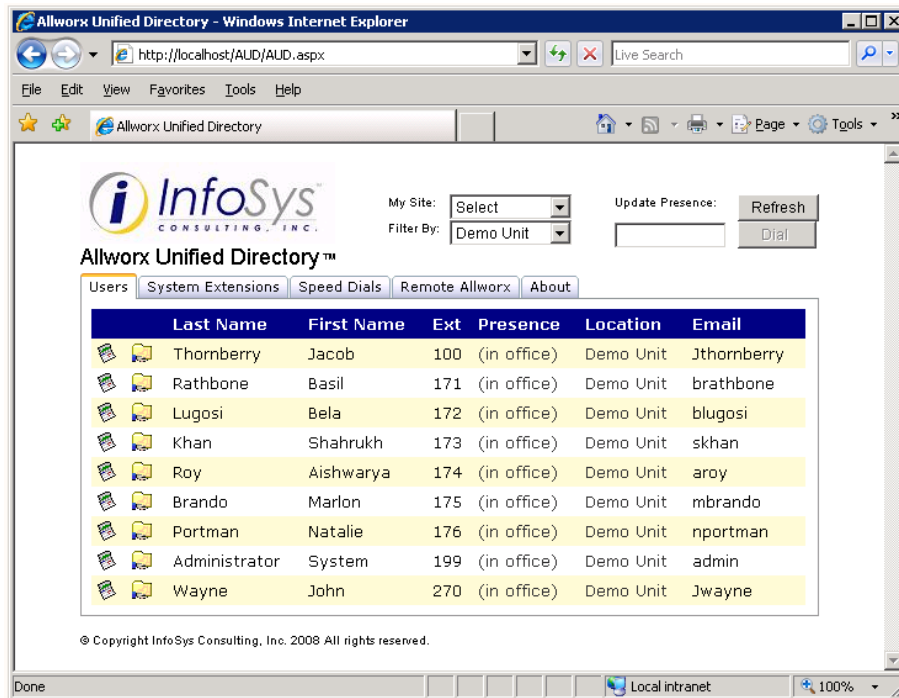
28. Test your AUD virtual directory configuration by right-mouse clicking on the AUD virtual directory and select Browse. The first time you browse to the virtual directory it will take a few moments to display the page. You will see an error indicating the Config.xml is not found. This is normal because you have not setup AUD yet.
29. Exit IIS Manager

## Setup Allworx servers in AUD

Once you have successfully tested your AUD virtual directory you are ready to configure your Allworx servers in AUD. To access the AUD setup page, use your web browser to access the address of your web server. (Example: <http://www.mydomain.com/aud/setup.aspx>)



1. In the PBX URL field, type the address of your first Allworx server. Note: ideally this would be a publicly accessible IP address or domain name.
2. In the Location field, enter a description of the location where this server is located (Example: Central Office).
3. In the Key field type the key you received from your Allworx distributor for the current Allworx server and press Add (alternatively you can skip this field and retrieve your keys later).
4. Repeat these steps for each of your Allworx servers.
5. Press the Get Keys button to retrieve your purchased license keys. Note: your web server must have access to the internet to obtain the keys. You purchase license keys from your Allworx distributor.
6. You can now display the Allworx Unified Directory by pressing the “Unified Directory” link in the upper right-hand corner of the setup screen. A screen similar to the following should display:



## Setup TAPI Interface

The TAPI interface enables you to dial directly from AUD. You must have previously installed the Allworx Call Assistant license key on each of your Allworx servers. Once TAPI is installed and configured on your PC, you can dial by clicking on the extension number, or by typing (or cut-and-paste) a number in the Dial field in the upper right-hand corner of the screen.

Note: in the screenshot above the Dial button is gray (unavailable) because the TAPI software has not been installed.

Instructions for installing TAPI are available from the Allworx website at <http://www.allworx.com>.

## Technical Support

Free technical support is available for addressing issues with the Allworx Unified Directory. Support for IIS server configuration and troubleshooting is on a fee basis.

<p>InfoSys Consulting, Inc. 834 Park Ave, Suite 202 Beaver Dam, WI 53916</p> <p>Email: <a href="mailto:Support@InfoSysHelp.com">Support@InfoSysHelp.com</a></p>	<p>Technical Support Hours</p> <p>Monday – Friday 8:00 A.M. – 5:00 P.M. (CST)</p> <p>Phone: 866-220-2546</p>
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